P-0191.011 - 18 -

## WHAT IS CLAIMED IS:

1. A radiation source comprising an anode and a cathode that are configured and arranged to create a discharge in a gas in a discharge region defined between the anode and the cathode and to form a plasma from a working vapor so as to generate electromagnetic radiation, wherein said cathode further defines a hollow cavity in communication with the discharge region through an aperture that has a substantially annular configuration around a central axis of said radiation source.